Notice of Allowability	Application No.	Applicant(s)
	10/828,827	MOTYKA ET AL.
	Examiner	Art Unit
	ERNST V. ARNOLD	1616
The MAILING DATE of this communication apper All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this app or other appropriate communication IGHTS. This application is subject to	plication. If not included
1. This communication is responsive to <u>4/8/10</u> .		
2. The allowed claim(s) is/are <u>38-40, 43-49 and 52-96 [renum 55 respectively].</u>	nbered as 1-6, 28-34, 13-22, 25, 23, .	24, 7-12, 26, 27, 41-53, 35-40, 54 and
 3. Acknowledgment is made of a claim for foreign priority una) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" on noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which give 5. CORRECTED DRAWINGS (as "replacement sheets") musting including changes required by the Notice of Draftspers 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in the case of the priority documents and the depose attached Examiner's comment regarding REQUIREMENT For the priority documents and the priority documents and the priority documents have a priority document regarding REQUIREMENT For the priority documents have a priority document regarding REQUIREMENT For the priority documents have a priority documents have a priority document regarding REQUIREMENT For the priority documents have a priority document regarding required by the priority documents have a priority document regarding required by the priority documents have a priority document regarding required by the priority documents have a priority document regarding required by the priority documents have a priority document regarding required by the priority documents have a priority document regarding required by the priority documents have a priority document have a pri	been received. been received in Application No cuments have been received in this application. Set the submitted in the	national stage application from the complying with the requirements S AMENDMENT or NOTICE OF tion is deficient. 948) attached ffice action of the back) of the complying with the front (not the back) of the complying submitted. Note the
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5. Notice of Informal Pa	ntant Angliantia
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)	<u> </u>	• •
2. Molice of Dranperson's Patent Drawing Neview (P10-946)	6. ☐ Interview Summary (Paper No./Mail Date	
 Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 7/26/04 	7. 🛛 Examiner's Amendm	ient/Comment
Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. X Examiner's Statement	nt of Reasons for Allowance
or priorgiodi Mulcital	9.	
/Ernst V Arnold/ Primary Examiner, Art Unit 1616		
	W. D	

Art Unit: 1616

EXAMINER'S AMENDMENT

This action is responsive to the Board decision of April 07, 2010.

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Gary Oakeson on 7/20/10.

The application has been amended as follows:

In the claims:

In claim 38, line 6, after "composition" insert --- wherein the hypoallergenic metal amino acid chelate composition includes coordinate covalent bonding and has an amino acid to metal ratio from about 1:1 to 3:1. ---

Cancel claims 41 and 42.

In claim 46, line 11, after "subject" insert --- wherein the hypoallergenic metal amino acid chelate composition includes coordinate covalent bonding and has an amino acid to metal ratio from about 1:1 to 3:1. ---

Cancel claims 50 and 51.

In claim 54, line 1, delete "52" and insert --- 53 ---.

Application/Control Number: 10/828,827

Art Unit: 1616

55. (new) A method as in claim 38, wherein the naturally occurring amino acid is selected from the group consisting of alanine, arginine, asparagine, aspartic acid, cysteine, cystine, glutamine, glutamic acid, glycine, histidine, hydroxyproline, isoleucine, leucine, lysine, methionine, omithine, phenylalanine, proline, serine, threonine, tryptophan, tyrosine, valine, and combinations thereof.

Page 3

- 56. (new) A method as in claim 38, wherein the metal is selected from the group consisting of iron, zinc, copper, manganese, calcium, chromium, vanadium, selenium, silicon, molybdenum, tin, nickel, boron, cobalt, gold, silver, and combinations thereof.
- 57. (new) A method as in claim 38, wherein the metal is ferrous iron and the naturally occurring amino acid is glycine, and wherein the glycine to iron molar ratio is about 2:1.
- 58. (new) A method as in claim 38, wherein the metal is copper and the naturally occurring amino acid is glycine, and wherein the glycine to copper molar ratio is about 2:1.
- 59. (new) A method as in claim 38, wherein the metal is zinc and the naturally occurring amino acid is glycine, and wherein the glycine to zinc molar ratio is about 2:1.
- 60. (new) A method as in claim 38, wherein the metal is manganese and the naturally occurring amino acid is glycine, and wherein the glycine to manganese molar ratio is about 2:1.
- 61. (new) A method as in claim 38, wherein the metal is ferric iron and the naturally occurring amino acid is glycine, and wherein the glycine to ferric iron molar ratio is about 3:1.

Application/Control Number: 10/828,827 Page 4

Art Unit: 1616

62. (new) A method as in claim 38, wherein the metal is chromium and the naturally occurring amino acid is glycine, and wherein the glycine to chromium molar ratio is about 3:1.

- 63. (new) A method as in claim 38, wherein the metal is magnesium and the naturally occurring amino acid is glycine, and wherein the magnesium to glycine molar ratio is about 1:1.
- 64. (new) A method as in claim 38, wherein the metal is calcium and the naturally occurring amino acid is glycine, and wherein the calcium to glycine molar ratio is about 1:1.
- 65. (new) A method as in claim 38, wherein the hypoallergenic metal amino acid chelate composition is substantially free of allergens such that upon administration of the composition to a subject in an effective amount to cause a medicinal or nutritional result, the composition does not produce a discernable adverse allergic reaction in the subject.
- 66. (new) A method as in claim 64, wherein the allergens are removed from the naturally occurring amino acid after formation, but before chelation with the metal.
 - 67. (new) A method as in claim 64, wherein the subject is human.
- 68. (new) A method as in claim 44, wherein the additive is a hypoallergenic organic acid selected from the group consisting of citric acid, fumaric acid, succinic acid, tartaric acid, malic acid, lactic acid, gluconic acid, ascorbic acid, pantothenic acid, folic acid, lipoic acid, oxalic acid, malcic acid, formic acid, acetic acid, pyruvic acid, adipic acid, alpha-ketoglutaric acid, and mixtures thereof.
- 69. (new) A method as in claim 44, wherein the additive is a hypoallergenic filler selected from the group consisting of grain flours, maltodextrins, vegetable flours or powders, inulin, and combinations thereof.

Application/Control Number: 10/828,827 Page 5

Art Unit: 1616

70. (new) A method as in claim 44, wherein the additive is a hypoallergenic flow control agent selected from the group consisting of funed silica, stearic acid, tale, and combinations thereof.

- 71. (new) A method as in claim 44, wherein the additive is selected from the group consisting of hypoallergenic free amino acids, hypoallergenic amino acid salts, and combinations thereof.
- 72. (new) A method as in claim 44, wherein the additive is selected from the group consisting of vitamins, coenzymes, cofactors, herbs, herbal extracts, protein powders, and combinations thereof.
- 73. (new) A method as in claim 44, wherein the additive is selected from the group consisting of mineral oils, binders, flavoring or taste-free additives, and combinations thereof.
- 74. (new) A method as in claim 38, wherein the amino acid source is prepared by synthetic synthesis.
- 75. (new) A method as in claim 38, wherein the amino acid source is prepared by fermentation.
- 76. (new) A method as in claim 46, wherein the naturally occurring amino acid is selected from the group consisting of alanine, arginine, asparagine, aspartic acid, cysteine, cystine, glutamine, glutamic acid, glycine, histidine, hydroxyproline, isoleucine, leucine, lysine, methionine, ornithine, phenylalanine, proline, serine, threonine, tryptophan, tyrosine, valine, and combinations thereof.

Page 6

Application/Control Number: 10/828,827

Art Unit: 1616

77. (new) A method as in claim 46, wherein the metal is selected from the group consisting of iron, zinc, copper, manganese, calcium, chromium, vanadium, selenium, silicon, molybdenum, tin, nickel, boron, cobalt, gold, silver, and combinations thereof.

- 78. (new) A method as in claim 46, wherein the metal is ferrous iron and the naturally occurring amino acid is glycine, and wherein the glycine to iron molar ratio is about 2:1.
- 79. (new) A method as in claim 46, wherein the metal is copper and the naturally occurring amino acid is glycine, and wherein the glycine to copper molar ratio is about 2:1.
- 80. (new) A method as in claim 46, wherein the metal is zinc and the naturally occurring amino acid is glycine, and wherein the glycine to zinc molar ratio is about 2:1.
- 81. (new) A method as in claim 46, wherein the metal is manganese and the naturally occurring amino acid is glycine, and wherein the glycine to manganese molar ratio is about 2:1.
- 82. (new) A method as in claim 46, wherein the metal is ferric iron and the naturally occurring amino acid is glycine, and wherein the glycine to ferric iron molar ratio is about 3:1.
- 83. (new) A method as in claim 46, wherein the metal is chromium and the naturally occurring amino acid is glycine, and wherein the glycine to chromium molar ratio is about 3:1.
- 84. (new) A method as in claim 46, wherein the metal is magnesium and the naturally occurring amino acid is glycine, and wherein the magnesium to glycine molar ratio is about 1:1.

Application/Control Number: 10/828,827

Art Unit: 1616

85. (new) A method as in claim 46, wherein the metal is calcium and the naturally occurring amino acid is glycine, and wherein the calcium to glycine molar ratio is about 1:1.

- 86. (new) A method as in claim 46, wherein the hypoallergenic metal amino acid chelate composition is substantially free of allergens such that upon administration of the composition to the subject in an effective amount to cause a medicinal or nutritional result, the composition does not produce a discernable adverse allergic reaction in the subject.
- 87. (new) A method as in claim 86, wherein the allergens are removed from the naturally occurring amino acid after formation, but before chelation with the metal.
 - 88. (new) A method as in claim 46, wherein the subject is human.
- 89. (new) A method as in claim 53, wherein the additive is an hypoallergenic organic acid selected from the group consisting of citric acid, fumaric acid, succinic acid, tartaric acid, malic acid, lactic acid, gluconic acid, ascorbic acid, pantothenic acid, folic acid, lipoic acid, oxalic acid, maleic acid, formic acid, acetic acid, pyruvic acid, adipic acid, alpha-ketoglutaric acid, and mixtures thereof.
- 90. (new) A method as in claim 53, wherein the additive is a hypoallergenic filler selected from the group consisting of grain flours, maltodextrins, vegetable flours or powders, inulin, and combinations thereof.
- 91. (new) A method as in claim 53, wherein the additive is a hypoallergenic flow control agent selected from the group consisting of firmed silica, stearic acid, talc, and combinations thereof.

Page 7

Application/Control Number: 10/828,827

Art Unit: 1616

- 92. (new) A method as in claim 53, wherein the additive is selected from the group consisting of hypoallergenic free amino acids, hypoallergenic amino acid salts, and combinations thereof.
- 93. (new) A method as in claim 53, wherein the additive is selected from the group consisting of vitamins, coenzymes, cofactors, herbs, herbal extracts, protein powders, and combinations thereof.
- 94. (new) A method as in claim 53, wherein the additive is selected from the group consisting of mineral oils, binders, flavoring or taste-free additives, and combinations thereof.
- 95. (new) A method as in claim 46, wherein the amino acid source is prepared by synthetic synthesis.
- 96. (new) A method as in claim 46, wherein the amino acid source is prepared by fermentation.

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance: <u>See Board of</u>

Patent Appeals and Interferences decision rendered on 4/7/10.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Claims 38-40, 43-49 and 52-96 [renumbered as 1-6, 28-34, 13-22, 25, 23, 24, 7-12, 26, 27, 41-53, 35-40, 54 and 55 respectively].

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERNST V. ARNOLD whose telephone number is (571)272-8509. The examiner can normally be reached on M-F 7:15-4:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ernst V Arnold/ Primary Examiner, Art Unit 1616